ABSTRACT

Thresholds of MISFETS of a Full Depletion-type SOI substrate cannot be controlled by changing impurity density as with bulk silicon MISFETs. Therefore, it is difficult to set a suitable threshold for each circuit. According to the semiconductor device of the present invention, gate electrodes of P-channel type MISFETs composing a memory cell are made of N-type polysilicon, gate electrodes of N-channel type MISFETs are made of P-type polysilicon and gate electrodes of P-channel type and N-channel type MISFETs of peripheral circuits and a logic circuit are made of P-type silicon germanium. A suitable threshold can be achieved for each circuit using a SOI substrate, thereby making it possible to fully leverage the characteristics of the SOI substrate.